

This listing of claims replaces all prior listings of claims in this application.

Claims 1-14 (canceled)

15. (previously amended) A process for preparing a mixture of benzyl-protected (4 β , 8)-oligomers of epicatechin or catechin comprises reacting a 5, 7, 3', 4'-tetra-*O*-benzyl-protected-epicatechin or -catechin monomer or a 5, 7, 3', 4'-tetra-*O*-benzyl-protected-(4 β ,8)-epicatechin or -catechin oligomer with 3-*O*-acetyl-4-[(2-benzothiazolyl)thio]-5, 7, 3', 4'-tetra-*O*-benzyl-epicatechin in the presence of silver tetrafluoroborate.

16. (withdrawn) A process for preparing a mixture of acetyl-protected and benzyl-protected (4 β ,8)-oligomers of epicatechin or catechin comprises reacting a 3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzylepicatechin monomer or a 3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzylepicatechin (4 β ,8)-oligomer and 3-*O*-acetyl-4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzylepicatechin in the presence of silver tetrafluoroborate 3-*O*-acetyl-4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzyl-epicatechin in the presence of silver tetrafluoroborate.

17. (currently amended) The process of Claim 15 or 16, ~~wherein oligomers are 5, 7, 3', 4' tetra-*O*-benzyl-protected (4 β ,8)-epicatechin oligomers,~~ and wherein the silver tetrafluoroborate is dried before the reaction.

18. (original) The process of Claim 17, wherein the drying is vacuum drying carried out immediately before the reaction.

19. (withdrawn) The process of Claim 16, wherein the mixture comprises protected trimer through protected heptamer when the protected oligomer is the dimer, protected tetramer through the protected

octamer when the protected oligomer is the trimer, and the protected pentamer through the protected undecamer when the protected oligomer is the tetramer.

20. (currently amended) The process of Claim ~~16~~ 15, further comprising the step of isolating the protected oligomers in the mixture by reverse phase high pressure liquid chromatography.

21. (withdrawn) The process of Claim 20, further comprising the step of removing the acetyl-protecting group(s) from the isolated oligomers.

22. (withdrawn) The process of Claim 21, wherein the acetyl-protecting group(s) are removed with aqueous tetra-n-butyl ammonium hydroxide.

23. (previously presented) The process of Claim 20, further comprising the step of removing the benzyl-protecting groups from the isolated oligomers.

24. (previously presented) The process of Claim 23, wherein the benzyl-protecting groups are removed by hydrogenolysis.

25. (withdrawn) The process of Claim 20, further comprising the steps of removing the acetyl protecting groups and then removing the benzyl protecting groups.

26. (withdrawn) The process of Claim 25, wherein the acetyl protecting group(s) are removed with aqueous tetra-n-butyl ammonium hydroxide and wherein the benzyl-protecting groups are removed by hydrogenolysis.

27. (withdrawn) A process for preparing a mixture of 5,7,3',4'-tetra-*O*-benzyl-epicatechin-(4 β ,8)-oligomers comprises the steps of:

(a) activating the C-4 position of 5,7,3',4'-tetra-*O*-benzyl-epicatechin with a 2-(benzothiazolyl)thio group to form 4-[(2-benzothiazolyl)thio]-5, 7, 3', 4'-tetra-*O*-benzylepicatechin; and

(b) self-condensing the 4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzylepicatechin in the presence of silver tetrafluoroborate or an acidic clay .

28. (withdrawn) The process of Claim 27, further comprising the steps of separating the oligomers and removing the benzyl groups.

29. (withdrawn) A process for chain extending a protected epicatechin (4 β ,8) oligomer with a C-4 activated, protected epicatechin (4 β ,8) oligomer comprises the step of condensing an epicatechin (4 β ,8)-oligomer having acetyl protecting groups at the 3-positions of all mers, benzyl protecting groups at the 5, 7, 3' and 4' positions of all mers, and having a C-4-[2-(benzothiazolyl)thio] activating group on a terminal mer with an epicatechin oligomer having acetyl protecting groups at the 3-positions of each mer and benzyl protecting groups at the 5, 7, 3' and 4' positions of each mer in the presence of silver tetrafluoroborate or an acidic clay.

30. (withdrawn) The process of Claim 29, wherein one of the C-4 activated, protected oligomers is 3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl-epicatechin-(4 β ,8)-3-*O*-acetyl-4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzyl-epicatechin; wherein the benzyl-protected oligomer is tetrakis (3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl)epicatechin (4 β ,8)₃-tetramer; wherein the protected, chain-extended oligomer is hexakis (3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl)epicatechin (4 β ,8)₅-hexamer.

31. (withdrawn) 4-[(2-Benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzyl-epicatechin or 4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzyl-catechin.
32. (withdrawn) A process for preparing the 4-[(2-benzothiazolyl)thio]-5,7,3',4'-tetra-*O*-benzyl-epicatechin of Claim 31 comprises reacting 5,7,3',4'-tetra-*O*-benzyl-4-(2-hydroxyethoxy) with an organoaluminum thiolate generated from 2-mercaptobenzothiazole.
33. (withdrawn) 4-[(2-Benzothiazolyl)thio]-3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl-epicatechin or 4-[(2-benzothiazolyl)thio]-3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl-catechin.
34. (withdrawn) A process for preparing the 4-[(2-benzothiazolyl)thio]-3-*O*-acetyl-5,7,3',4'-tetra-*O*-benzyl-epicatechin of Claim 33 comprises reacting 5,7,3',4'-tetra-*O*-benzyl-4-(2-hydroxyethoxy)-epicatechin with an organoaluminum thiolate generated from 2-mercaptobenzothiazole followed by acetylation.
35. (withdrawn) A process for preparing a (4 β ,8)-dimer comprises the step of reacting 4-(benzylthio)epicatechin or 4-(benzylthio)catechin with epicatechin or catechin in the presence of silver tetrafluoroborate or dimethyl (methylthio) sulfonium tetrafluoroborate.
36. (withdrawn) 4-(Benzylthio)epicatechin or 4-(benzylthio)catechin.
37. (withdrawn) A process for preparing the compound of Claim 36 comprises reacting epicatechin or catechin with benzyl merception.

38. (originally presented) A method of treating breast cancer in a mammal in need of such treatment, which treatment inhibits cancer cell growth through cell cycle arrest in the Go/G phase and comprises administering to the mammal epicatechin-(4 β ,8)₄-pentamer, wherein the breast cancer cells are selected from the group consisting of human breast cancer cell lines MCF-7, SKBR-3, MDA 435, and MDA MB-231.

39. (withdrawn) The method of Claim 38, wherein the pentamer is a purified procyanidin fraction isolated from cocoa beans as a cocoa extract.

40. (withdrawn) The method of Claim 39, wherein the pentamer is a synthetically prepared procyanidin.

41. (withdrawn) The method of Claim 39, wherein the breast cancer cells are from the MDA MB-231 cell line.